

L 7751-66

ACC NR: AP5027832

$$\vec{x}[n] = \vec{f}[n] - \sum_{m=0}^n \vec{w}[n-m] \Phi(\vec{x}[m], m), \quad (1)$$

This scheme is described by the vector difference equation where $\vec{x}[n]$, $\vec{f}[n]$, $\vec{\phi}(\vec{x}[n], n)$ are M-dimensional error vectors of the external interactions and the characteristics of the nonlinear elements, respectively; $\vec{w}[n]$ is the square matrix of M-th order the elements of which are the pulse characteristics of the linear pulse section (LPS). It is assumed that the LPS is stable and that the characteristics of nonlinear elements are subject to certain conditions. The author then formulates and proves the criterion of absolute stability in the form of a theorem. The new criterion can be generalized easily to include systems with further limitations imposed on the nonlinear element characteristics or the stability of processes. The paper was presented by Academician B. N. Petrov, 26 Mar 65. Orig. art. has: 24 formulas and 1 figure.

SUB CODE: IE, MA / SUBM DATE: 17Mar65 / ORIG REF: 006 / OTHER REF: 002

nw

Card 2/2

TSYPKIN, Ya.Z.; FARADZHEV, R.G.

The laplace-Galois transformation in the theory of sequence machines. Dokl. AN SSSR 166 no.3:570-573 Ja '66. (MIRA 19.1)

1. Institut avtomatiki i telemekhaniki, Moskva. Submitted May 6, 1965.

L 20743-66 EWT(d)/T/EWP(1) IJP(c)

ACC NR: AP6010284

SOURCE CODE: UR/0103/66/000/003/0094/0096

AUTHOR: Tsyarkin, Ya. Z. (Doctor of technical sciences) (Moscow)

ORG: none

TITLE: Application of the method of stochastic approximations to estimating the unknown probability density from observation points

SOURCE: Avtomatika i telemekhanika, no. 3, 1966, 94-96

TOPIC TAGS: automatic control, probability density estimation, stochastic approximation method, sampled data system, continuous system

ABSTRACT: It is shown that the problem of estimating the unknown probability density $P(x)$ from the observation points $x^k (k = 1, 2, \dots, n)$, which already has been analyzed by various authors, can be solved simply by the Robbins-Monro method of stochastic approximations. $P(x)$ is approximated by a finite series

$$\hat{P}(x) = \sum_{v=1}^N c_v \varphi_v(x). \quad (1)$$

where $\varphi_v(x)$ is a system of orthonormal functions and c_v are unknown coefficients which are to be determined. The coefficients c_v satisfying the condition

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UDC: 621.391.1:518.5

L 20743-66

ACC NR: AP6010284

$$I = \int_X \left[P(x) - \sum_{v=1}^N c_v \varphi_v(x) \right]^2 dx = \min. \quad (2)$$

are sought. Proceeding on the basis of equation (2), and utilizing the properties of the system of orthonormal functions, it is deduced that the coefficients c_v are equal to the mathematical expectation of the orthonormal function, that is,

$$c_\mu = M\{\varphi_\mu(x)\} \quad (\mu = 1, 2, \dots, N). \quad (3)$$

To determine c_μ , equation (3) is represented in the form

$$M\{\varphi_\mu(x) - c_\mu\} = 0 \quad (\mu = 1, 2, \dots, N) \quad (4)$$

to which the method of stochastic approximations is applied. A recursion procedure (the algorithm) for determining the unknown coefficients of the probability density expansion is presented. Sampled-data systems and continuous systems realizing the derived algorithms are presented. Orig. art. has: 12 formulas and 2 figures. [LK]

SUB CODE: 12/13 SUBM DATE: 26Jul65/ ORIG REF: 005/ OTH REF: 005/ ATD PRESS: 4226

Card 2/2

L 04990-67 EWT(d)/LWP(●)/EWP(k)/LWP(h)/EWP(1) GD
ACC NR: AT8016436

(A) SOURCE CODE: UR/0000/85/000/000/0089/0103

AUTHOR: Tsyppkin, Ya. Z.

ORG: none

62
BT/

TITLE: Principles of the theory of nonlinear automatic pulsed systems

SOURCE: International Federation of Automatic Control. International Congress. 2d, Basel, 1963. Diskretnyye i samonastroyayushchiyesya sistemy (Discrete and adaptive systems); trudy kongressa. Moscow, Izd-vo Nauka, 1965, 89-103

TOPIC TAGS: nonlinear automatic control, automatic control theory, pulse width modulation, pulse phase modulation, control system stability

ABSTRACT: The theory of linear automatic pulsed systems (LAPS) is so highly developed that its basic problems in synthesis and analysis may be solved, but nonlinear automatic pulsed systems (NAPS) are only in the first stage of development. Previous methods used to study NAPS have given poor results; therefore this paper studies NAPS stability and quality by an approach based on an idea of V. M. Popov (Studii si Cecretari de Energetica, 9, 1959, N 1, s. 119.; Avtomatika i telemekhanika, 22, 1961, No. 8, s. 961) which he used to study continuous nonlinear systems and which closely involves physical concepts such as frequency and time

Card 1/2

8 996-67
ACC NR: AT6016436

characteristics, giving the widest sufficient conditions for stability obtainable from quadratic Lyapunov functions. This approach simplifies determination of NAPS processes, making it possible to determine when the absence of periodic solutions guarantees NAPS stability and to study NAPS by methods such as those used in studying LAPS. The approach described makes it relatively simple to find the region of absolute NAPS stability and to estimate the indexes of process quality (degree of stability and total quadratic evaluation) and to decide when it is unnecessary to add special self-adjusting circuits which complicate NAPS. This requires NAPS structures of slight sensitivity to changes in nonlinear characteristics; LAPS methods may be used here. The method may be generalized to study width, phase, and frequency modulated NAPS. Orig. art. has: 54 formulas and 10 figures.

SUB CODE: 09/ SUBM DATE: 29Sep65/ ORIG REF: 009/ OTH REF: 006
13/

Card

2/2 *th*

REC NR: AP7004245

SOURCE CODE: UR/0103/67/000/001/0122/0132

AUTHOR: Devyaterikov, I.P. ^(Moscow); Propoy, A.I. ^(Moscow); Tsypkin, Ya.Z. ^(Moscow)

ORG: none

TITLE: On recurrence algorithms for teaching pattern recognition

SOURCE: Avtomatika i telemekhanika, no. 1, 1967, 122-132

TOPIC TAGS: pattern recognition, learning system, stochastic *PROCESS*, approximation method, ~~teaching~~ algorithm, *AUTOMATIC MACHINE TEACHING*

ABSTRACT: It is pointed out that many articles have been published recently in which particular algorithms for teaching pattern recognition to automata and schemes for their realization have been proposed, but a more general approach to the solution of this kind of problems is necessary. A general approach to deriving recurrence algorithms for teaching pattern recognition to automata is presented, utilizing the results of Ya. L. Tsypkin (Avtomatiki i telemekhanika, v. 26, no. 11, 1965, 1947—1950). The separating function $Y = f(x)$ is approximated by a finite sum where $\{\phi_v(x)\}$ are linearly independent functions and C_v are unknown coefficients. The problem of determining the $f(x)$ is reduced to the minimization of a certain functional which is taken as the mathematical expectation of function $F(f(x) - f(x))$. Finally, the problem is reduced to the solution of a certain regression equation. Two algorithms for

Card 1/2

UDC: 62-50

ACC NR: AP7004245

$$\hat{f}(x) = \sum_{v=1}^N c_v \varphi_v(x) = c^T \varphi(x), \quad (1)$$

solving this equation (in the deterministic case when the explicit form of the functional is known and in the probabilistic case when the mathematical expectation of the functional gradient is not known) are presented. The conditions under which the second algorithm is convergent are established. It is shown how particular algorithms derived by various authors can be obtained as particular cases of general algorithms. A comparative analysis of derived and known algorithms is made. A second approach in deriving a teaching algorithm based not on the approximation of a separating function, but on the approximation of its sign is considered. A general recurrence algorithm is derived and compared with the known algorithms developed by various authors. [LK]

SUB CODE: 12,06/SUBM DATE: 06Jul66/ ORIG REF: 011/ OTH REF: 009/
ATD PRESS: 5114

Card 2/2

TRANSLATION: Considerable evidence for the critical density, coalescence of molecular absorption bands, and the deviation from Lambert's law are observed in investigations of molecular absorption spectra with narrow bands of width $\sim 1 \text{ \AA}$ with instruments having slits of $\sim 1 \text{ \AA}$.

TSYPKINA, ED.

✓ The Variation of the Influence of the Structural Factors on the Cyclic Strength of Steel. I. L. Mirkin and E. D. Tsyphira. (Zhur. Tekhn. Fiz., 1954, 24, (12), 2200-2210). [In Russian]. The influence of the various structural states of ferrite on its cyclic strength were investigated. It was established that changes of structure caused by alloying low-carbon steel in a tempered state produce simultaneous increase in the static and cyclic strength and that the grain size of ferrite has no practical influence on the strength limit.—v. o.

(1)

USSR .

283/114

669.14.291

On the Separate Effect of
Structural Factors on Cyclic
Strength of Steel

Zh. tekhn. Fiz.

24(12), 2209-2216

1954

U.S.S.R.

I.L. Mirkin and E.D. Tsypkina

Cyclic strength of low carbon constructional steel alloyed with C, Mn, Si, Cr, Ni and W, assessed by its strength at pulsating load (symmetrical bending), depends on its chemical composition and structure. The behaviour of static and cyclic strength is nearly proportional. Alloying of low carbon steel in an annealed state enhances both static and cyclic strength. The size of ferrite grains does not affect any changes in strength at pulsating load. Overheating of steel, providing it does not reduce resistance to ductile fracturing, does not influence the strength at pulsating load, either. Cold hardening has the same effect as the resistance to fracture. (Bibl. 15)

DAVIDOV, F.; TSYPKINA, F.L., red.; LIVSHITS, I.L., tekhn.red.

[Facts only] Tol'ko fakty. Moskva, Izd-vo "Sovetskaya Rossiya,"
1960. 61 p. (MIRA 14:4)
(Economic conditions) (Labor and laboring classes)
(Social conditions)

PETUKHOV, Boris Fedorovich; TSYPKINA, F.L., red.; POPOV, N.D., tekhn.red.

[We are friends forever; notes about a trip to Czechoslovakia]
Druzha naveki; zametki o prebyvanii v Chekhoslovakii. Moskva,
Izd-vo "Sovetskaya Rossiya," 1959. 61 p. (MIRA 13:3)

1. Predsedatel' Krasnodarskogo krayispolkoma (for Petukhov).
(Czechoslovakia--Description and travel)
(Czechoslovakia--Industries)

GEORGIYEV, Aleksandr Vasil'yevich; PROKUDENKOV, A.I., red.; TSYPKINA,
F.L., red.; MARAKASOVA, L.P., tekhn. red.

[Progressive experience is beneficial to the whole nation]
Peredovoi opyt - nashe bogatstvo. Moskva, Izd-vo "Sovetskaia
Rossiia," 1962. 106 p. (MIRA 15:4)

1. Pervyy sekretar' Altayskogo krayevogo komiteta Kommunisti-
cheskoy partii Sovetskogo Soyuza (for Georgiyev).
(Altai Territory--Agriculture)

TARASOV, Grigoriy Georgiyevich, Geroy Sotsialisticheskogo Truda;
TSYPKINA, F.L., red.; KARASIK, N.P., tekhn.red.

[Our experience in fulfilling our obligations] Nash opyt
vypolneniia obiazatel'stv. Moskva, Izd-vo "Sovetskaya Rossiya,"
1960. 35 p. (MIRA 13:4)

1. Sekretar' Shatskogo raykoma Kommunisticheskoy partii Sovetskogo
Soyuza (for Tarasov).
(Ryazan Province--Agriculture)

KVACHEV, Petr Osipovich; TSYPKINA, F.L., red.; BYLINSKAYA, I.G.,
tekhn.red.

[Development of automation; notes of the secretary of the party
committee at the First State Bearing Plant] Shagi avtomatiki;
zametki sekretaria Partkoma Pervogo Gosudarstvennogo podzhipni-
kovogo zavoda. Moskva, Izd-vo "Sovetskaya Rossiya," 1959.
53 p. (MIRA 13:1)
(Automation) (Moscow--Bearing industry)

VOLKOV, Feliks Mikhaylovich; VOZNESENSKIY, Lev Aleksandrovich; TSYPKINA,
F.L., red.; YRLAGIN, A.S., tekhn. red.

[Communism is born in work; the role of collectives and shock
workers of communist labor in the building of communism] Kom-
munizm rozhdaetsia v trude; o roli dvizheniia kollektivov i udarnikov
kommunisticheskogo truda v stroitel'stve kommunizma. Moskva, Izd-vo
"Sovetskaiia Rossiia," 1961. 74 p. (MIRA 14:12)
(Labor and laboring classes)

RASPORKIN, Fedor Pavlovich; TSYPKINA, F.L., red.; POPOV, N.D., tekhn.
red.

[Shoots]Vskhody. Sovetskaia Rossiia, 1962. 78 p.
(MIRA 15:9)

(Masatov, Nikolai Pavlovich)
(Rostov Province--Agriculture)

YEMEL'YANOV, B.V.; SMIRNOV, V.I.; TSYPKINA, L.M.

Analysis of the system $\text{NaCl} - \text{KCl} - \text{Na}_2\text{CO}_3 - \text{H}_2\text{O}$ according to
two properties. Zav. lab. 29 no.10:1174-1175 '63. (MIRA 16:12)

AUTHORS: Tsypkina, M.N.: and Balashova, I.M. SOV/80-59-1-26/44

TITLE: On the Method of Separating Lignosulfonic and Carbohydrate-Sulfonic Acids (K metodike razdeleniya lignosul'fonovykh i uglevod-sul'fonovykh kislot) Third Communication (Soobshcheniye III)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Nr 1, pp 166-170 (USSR)

ABSTRACT: In order to study lignin reactions taking place in the sulfite pulping process, it is necessary to separate from the lye and to investigate lignosulfonic acids which are forming during the sulfite cooking. The separation of lignosulfonic acids from carbohydrate-sulfonic acids can be effected, making use of Professor K.B. Yatsimirskiy's observations, by applying complex salts for settling, because carbohydrate-sulfonic acids are not settled with these salts. The experiments carried out by the authors with the participation of Ye.I. Kosilova, M.N. Atapina and Z.P. Lampsakova have shown that the complex salts $[\text{Co}(\text{NH}_3)_6]\text{Cl}_3$ and $[\text{Co}(\text{NH}_3)_6](\text{NO}_3)_3$ indeed ensure the complete separation of lignosulfonates from their solutions and from the carbohydrate-sulfonic acids. The pH-factor of the solution, the degree of cellulose boiling, and the type of cation bound with the lignosulfates do not affect the settling of lignosulfonic acids with these salts.

Card 1/2

SOV/80-59-1-26/44

On the Method of Separating Lignosulfonic and Carbohydrate-Sulfonic Acids

There are 2 tables, 1 graph and 4 Soviet references.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut bumagi (Central Scientific Research Institute for Paper)

SUBMITTED: May 16, 1957

Card 2/2

LITVAK, Lev Yevseyevich; ~~TSYPKINA, Mira Abramovna~~; RAYEVSKIY, L.A., red.;
BAKHTIYAROV, A., tekhn.red.

[Development of local and cooperative industries in Uzbekistan]
Razvitie mestnoi i kooperativnoi promyshlennosti Uzbekistana.
Tashkent, Gos. izd-vo Uzbekskoi SSR, 1957. 124 p. (MIRA 11:12)
(Uzbekistan--Industries)

TSYPKINA, M.N.; MAKHNOVETSKAYA, G.I.; SERGEYEVA, V.V.

"Active" and "inactive" sulfur of cation exchangers. Zhur.prikl.khim.
35 no.11:2440-2444 N '62. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsellyuloznoy i
bumazhnoy promyshlennosti.
(Sulfur) (Ion exchange resins)

L 7885-66 EWT(m)/ETC/EWG(m) DS/RM

ACC NR: AP5025040

SOURCE CODE: UR/0286/65/000/016/0085/0085

AUTHORS: Eliashberg, M. G.; Tsyapkina, M. N.; Makhnovetskaya, G. I.; Boyarskaya, R. K.; Sergeyeva, V. V.

ORG: none

TITLE: Method for obtaining cation exchange resin from waste solutions of the sulfite cellulose industry. Class 39, No. 173952

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 85

TOPIC TAGS: cation exchange, resin, sulfite waste liquor, cellulose

ABSTRACT: This Author Certificate presents a method for obtaining cation exchange resin from waste liquor of the sulfite cellulose industry (alcoholic sulfite, malt, and yeast brew). To reduce the cost of manufacture, the waste malt solutions are freed from the base by cationation and concentrated by evaporation at a temperature of 90-100C until the dry materials content reaches 50%. The mixture is heated to dryness and condensed at the same temperature until the resin gains the desired degree of swelling.

SUB CODE: 07, II/

SUBM DATE: 01Mar61

UDC: 541.183.123.2:678.557

Card 1/1

TSYPKINA, M.N.; BALASHOVA, I.M.

Method of separation for lignosulfonic and carbohydratesulfonic acids. Zhur.prikl.khim. 32 no.1:166-170 Ja '59.

(MIRA 12:4)

1. Tsentral'nyy nauchno-issledovatel'skiy institut bumagi.
(Lignosulfonic acid) (Sulfonic acid)

ELIASHBERG, M.G.; TSYPKINA, M.N.

Sulfite pulping with acid containing an ammonium base. Bum.prom.
34 no.12:2-6 D '59. (MIRA 13:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut tsellyuloznoy
i bumazhnoy promyshlennosti.
(Sulfite liquor) (Ammonium oxide)

ELIASHBERG, M.G.; TSYPKINA, M.N.; KHRISTYUK, I.A.

New data on the theory of the sulfite process and its practical significance. Bum.prom.31 no.3:13-16 Mr '56. (MIRA 9:7)

1. TSentral'nyy nauchno-issledovatel'skiy institut tsellyulezney i bumazhnoy promyshlennosti.
(Woodpulp) (Sulfite liquor)

~~TSYPKINA, M. N.~~; OSPISHCHEVA, M. V.

Production of extrastrong sulfite pulp. Bum.prom. 35 no.10:8-10
0 '60. (MIRA 13:10)

1. Vsesoyuznyy nauchno--issledovatel'skiy institut tselly_lozno-
bumazhnoy promyshlennosti.
(Woodpulp)

TSYPKINA, M. N.; ATAPINA, M. N.

Testing of lignosulfonic acids formed during sulfite cooking
in the presence of condensed lignin. Trudy VNIIB no. 47:50-63
'61. (MIRA 16:1)

(Lignosulfonic acids)

L 08423-67 EWT(m)/EWP(t)/ETI IJP(č) JD/HW/JG/GD/JH
ACC NR: AT6034456 SOURCE CODE: UR/0000/66/000/000/0200/0201

AUTHOR: Mints, R. S.; Tsyapkina, Ye. D.; Sipina, M. P.; Malkov, Yu. S.

ORG: none

TITLE: Wrought heat-resistant alloys of Nb-Ni-Al system

SOURCE: AN SSSR. Institut metallurgii. Svoystva i primeneniye zharoprochnykh splavov (Properties and application of heat-resistant alloys). Moscow, Izd-vo Nauka, 1966, 200-201

TOPIC TAGS: heat resistant alloy, niobium, nickel, aluminum, ~~aluminum~~, ~~niobium-nickel-aluminum alloy~~, ~~nickel-niobium compound~~, ~~nickel-niobium compound~~, alloy structure, ~~reference~~ property

ABSTRACT: The phases of the Ni-Ni₃Al-Ni₃Nb system have been investigated in a search for wrought heat-resistant alloys consisting of γ'-phase strengthened by niobium. Microstructure and x-ray diffraction analyses revealed the existence of three regions in the Ni-Ni₃Al-Ni₃Nb system at niobium contents of up to 20%: a single-phase region of a nickel-base γ-phase, another single phase region of Ni₃Al, and a two-phase γ + γ' region. The most heat-resistant ternary alloys are located in the two-phase region. These alloys have a uniform, finely dispersed microstructure. One such alloy had a tensile strength of 106—119 kg/mm².

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L 08/23-67

ACC NR: AT6034456

0

an elongation of 10—20%, a reduction of area of 18—30%, and an impact strength of 6—12 mkg/cm². In view of high characteristics of ductility, some additional alloying can be used to increase strength.

SUB CODE: 11/ SUBM DATE: 10Jun66/ ORIG REF: 007/ ATD PRESS: 5103

Card 2/2 1s

TSYPKINA, Ye.D.

MIRKIN, I.L.; TSYPKINA, Ye.D.

Divided effect of structural factors on the cyclic strength of
steel. Zhur.tekh.fiz. 24 no.12:2209-2216 D '54. (MLBA 8:2)
(Steel--Testing)

TSYPKINA, Ye. D.

USSR/ Engineering - Testing methods

Card 1/1 : Pub. 128 - 16/25

Authors : Mirkin, I. L., and Tsypkina, E. D.

Title : About the selection of a steel structure for components operating under cyclic loads

Periodical : Vest. mash. 1, 72-75, Jan 1955

Abstract : A narrative report is presented concerning investigations conducted by the Central Scientific Research Institute of the Ministry for Ship Building Industry, on methods for selecting proper types of steel for components operating under cyclic loads. Technical data is presented on steel specifications, types of specimen used, and the graphic calculation of cyclic loads. Two USSR references (1947). Tables; graphs; drawing.

Institution :

Submitted :

MESHCHERINOVA, O.N., kand.tekhn.nauk; TRIFONOVA, T.N., inzh.; TORPANOVA, G.A., kand.tekhn.nauk; SMIRNOV, Ye.V., inzh.; BABAKOV, A.A., kand.tekhn.nauk; KAREVA, Ye.N., inzh.; ZHADAN, T.A., inzh.; TALOV, N.P., inzh.; TSYPKINA, Ye.D., kand.tekhn.nauk; DORONIN, V.M., inzh.; DAVIDOVA, L.N., inzh.; PRIDANTSEV, M.V., prof., doktor tekhn.nauk, red.; LIVSHITS, G.I., kand.tekhn.nauk, red.; BERLIN, Ye.N., red.izd-va; MIKRAYLOVA, V.V., tekhn.red.

[Steels with low nickel content; a handbook] Stali s ponizhen-
nym soderzhanisem nikela; spravochnik. Pod red. M.V.Pridantseva
i G.I.Livshitsa. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po
chernoi i tsvetnoi metallurgii, 1961. 200 p.

(MIRA 14:12)

1. Direktor instituta kachestvennykh staley TSentral'nogo
nauchno-issledovatel'skogo instituta chernoy metallurgii im.
I.P.Bardina (for Pridantsev).

(Nickel steel)

USSR.

283/114

669.14.291

Zh. tekhn. Fiz.

24(12), 2209-2216

1954

U.S.S.R.

On the Separate Effect of
Structural Factors on Cyclic
Strength of Steel

I. L. Mirkin and E. D. Tsypkina

Cyclic strength of low carbon constructional steel alloyed with C, Mn, Si, Cr, Ni and W, assessed by its strength at pulsating load (symmetrical bending), depends on its chemical composition and structure. The behaviour of static and cyclic strength is nearly proportional. Alloying of low carbon steel in an annealed state enhances both static and cyclic strength. The size of ferrite grains does not affect any changes in strength at pulsating load. Overheating of steel, providing it does not reduce resistance to ductile fracturing, does not influence the strength at pulsating load, either. Cold hardening has the same effect as the resistance to fracture. (Bibl. 15)



"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320009-7

TO: INK 10/8 E 7

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320009-7"

CA

20

The production of a water-resistant composition roofing impregnated with Fergana petroleum and of mineralized cartons from Gusa-Pai. M. N. Tsypkina. *Tsentral. Nauch.-Issledovatel. Inst. Bumash. Prom., Materialy* No. 22, 202-15(1937); *Chem. Zentr.* 1938, I, 474.—Gusa-Pai is a product of the cotton plant and contains 81.1% wood, 1.80% bark and tanning principles. It contains ash 1.01, lignin 27.72, cellulose 38.9, pentosans 24.01, ether ext. 1.0 and alc. ext. 1.1%. Water-tight compn. roofing can be obtained by working up the mass with 40% bitumen. Impregnation with water glass (8%) increases its water-tight properties. In the sizing of cartons 2% colophonium gives the best results.

W. A. Moore

21

Obtaining solid pitch that softens at 100°. Ya. A. Bron and O. Ya. Tsypkina. *Coke and Chem. (U. S. S. R.)* 9, No. 7: 40 (1939); *Chimie & Industrie* 43, 115. By conducting the distn. of tar in such a way as to obtain solid pitch that softens at 100°, it is possible to increase the oil yield by 8%, the amt. of the anthracene fraction being raised from 18 to 20%. The compn. of this fraction differs but little from the anthracene fraction obtained by A. Papineau-Couture normal distn.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																																																			
<p>21</p> <p>TSYPKINA, O. Ya.</p> <p>Content of pyrene and other high-boiling compounds in coal tar, pitch, and pitch distillates. P. P. Karpukhin and O. Ya. Tsypkina. <i>Zhur. Priklad. Khim.</i> (J. Applied Chem.) 21, 205-6 (1948).—Distn. of pitch, m. 40°, was accompanied by much cracking; the distillate analyzed according to Karpukhin and Arepkova (<i>C.A.</i> 38, 3454) gave 0.23% pyrene in fraction b. 297-330°, 0.42% in 330-46° fraction, and 1.62% in 346-62° fraction. Pitch distillates (obtained by steam distn. at 400 mm.) from plant production averaged 8.07% pyrene. Pitch produced by steam blowing of crudes (m. 60°) gave distillates contg. 4.43% pyrene, when steam blowing was done at 360°; air blowing at 300° gave 9.43% pyrene in the distillates. In addn., products obtained by air blowing of 40° pitch gave 8% chrysene in the 394-440° fraction (isolated by crystn.; m. 220°); the mother liquor (after chrysene removal) gave yellow solid, m. 201.4-202°.</p> <p>G. M. Kosolapoff</p>																																																			
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			
<p>COMMON ELEMENTS</p> <p>COMMON VARIABLES INDEX</p>																																																			

TSYPKINA, O.Ya., kand.tekhn.nauk; SHMUNER, A.Sh., inzh.

Glass reinforced plastics are new building materials. Sbor. trud.
IUZHNI no.2:142-147 '59. (MIRA 13:9)

1. Yuzhnyy nauchno-issledovatel'skiy institut po stroitel'stvu.
(Glass reinforced plastics)

TSYPKINA, O. Ya.

USSR/Chemical Technology. Chemical Products and Their I-13
Application--Treatment of solid mineral fuels

Abs Jour: Ref Zhur-Khidmiya, No 3, 1957, 9223

Author : Tsypkina, O. Ya.

Inst : Not given

Title : Investigation of the Effect of Vacuum on the Effect-
iveness of the Separation of Some Polynuclear Coal
Tar Compounds During Rectification

Orig Pub: Zh. prikl. khimii, 1955, Vol 28, No 2, 185-192

Abstract: Calculations have been made to determine the neces-
sary number of theoretical plates (NTP) for the
separation of binary systems anthracene-carbazole
(AC) and pyrene-fluoranthrene (FF) for a given rec-
tification factor at pressures P from 1 to 760 mm
Hg. In the case of AC the vapor pressures were
taken from tables or calculated. The calculated
relative volatility (coefficient α) at various
pressures has been found to be: 760, 1.278; 400,

Card 1/2

USSR, Chemical Technology. Chemical Products and Their I-13
Application--Treatment of solid mineral fuels

Abs Jour: Ref Zhur-Khimiya, No 3, 1957, 9223

Abstract: 1.323; 200, 1.403; 100, 1.469; 60, 1.711; 40, 1.937; 20, 2.413; 10, 2.549; 5, 2.626; 1, 2.720. The NTP at $P = 60$ is less than half that at $P = 760$, the NTP varies little from $P = 60$ to $P = 20$. Nearly complete separation of the AC system is achieved starting at $P = 40-20$ mm Hg. In the case of PF the vapor pressure of each of the components was determined experimentally up to 300° ; vapor pressure values for temperatures higher than 300° were calculated from these data by the Duerling formula. The calculated values for the coefficient α at various P are as follows: 760, 1.2; 400, 1.231; 200, 1.341; 100, 1.440; 60, 1.600; 40, 1.700; 20, 1.901; 10, 2.153; 5, 2.525; 1, 3.181. The NTP at $P = 100-60$ is smaller by a factor of 2-2.5 compared to the NTP at $P = 760$. Practically complete separation of PF is obtained with NTP = 20 starting $P = 60-40$ mm Hg.

Card 2/2

TSYPKINA, O.Ya., kand.tekhn.nauk

Glass-reinforced plastic reinforcement developed by IUZhNII. Bet.
i zhel.-bet. no.9:417-418 S '61. (MIRA 14:10)
(Glass reinforced plastics) (Concrete reinforcement)

TSYPKINA, O. Ya.

AID P - 2263

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 8/19

Author : Tsypkina, O. Ya.

Title : ~~was achieved at 40-20 mm absolute pressure, and of the~~
The effect of vacuum on the efficiency of separation
of certain polynuclear coal tar compounds by fractional
distillation

Periodical: Zhur. prikl. khim., 28, no.2, 185-92, 1955

Abstract : Complete separation of the system anthracene- carbazole
was achieved at 40-20 mm absolute pressure, and of the
system pyrene-fluoranthene at 60-40 mm absolute
pressure. Ten tables, 4 references (2 Russian: 1941-
1946).

Institution: None

Submitted : Je 22, 1953

... are added to the type of ... and C black being introduced into the mixt., the ... is vulcanized with 3-5.5% S and 1-2% ... accelerator. The C black added to I has the same effect as in ... with synthetic rubber. For preservation of the original formulation, the corresponding phys. chem. characteristics and the technological properties of the mixt., it is recommended when ...

TSYPRINH, Ye. D.

BOOK 1 BOOK REVIEWS 807/1958

Moscow. Sam machine-building propaganda in. P.A. Dzerzhinskaya
Sovremennye spetsy i lit'vishchikovy chetvetya (Contemporary alloys and their
heat treatment) Moscow, Makiya, 1958. 35 p. 12,000 copies printed.
Additional Propaganda Agency. Chetvetya po raznoyemuy politicheskoy i
mashinoye nauky MOK.

M. (title page); Ye. A. Geller, Doctor of Technical Sciences; M. (title page);
V.F. Ibrakhimov, Engineer; Tech. M.; P.I. Medel', Managing Ed. for
Literature on Metal Working and Tool Making; E.D. Boyal'man, Engineer.

REVIEW: The book is intended for engineering and technical personnel of heat-
treatment shops and test laboratories of machine-building plants.

CONTENT: This collection of 85 articles, compiled by 35 authors, aims to acquaint
the reader with modern practice in the heat treatment of steels. The authors
are primarily concerned with the development of various types of structural,
tool, and heat-resistant steels and with the use of their alloying elements.
Materials-handling equipment is described at some length. The treatment of
alloys, particularly those of titanium, also comes within the scope of the
collection. The book is thoroughly diagrammed, and a good deal of the material
is shown in graphical form. Among the problems dealt with are: the treatment
of steels of different grades; the introduction of the modern methods of heat-
treating equipment, together with alloying elements and tool construction, and the
application of different types of alloying elements. There are numerous tables
and diagrams. Much material is included at the end of chapters are
presented in the form of a bibliography. The articles comprising this collection are reports
delivered at a conference held in the Scientific and Technical Propaganda
House (near P.A. Dzerzhinskaya) in Moscow.

Contemporary Alloys and Their Heat Treatment 807/1958

Shchepel'nikov, I.L. Future Prospects for the Use of High-Frequency Currents in Machine-Building	879
Pedrotzko, E.S. Mechanization of the Heat Treatment of Tools	892
Pavlov, B.M. Magnetic Quality-control Method in the Heat Treatment of Tools	904
Iordaniy, V.F. Weldable Aluminum-Magnesium Alloys	908
Kopylov, Ye. D. Fatigue Strength of Industrial Titanium	914
El'yashov, N.A. Strength of Welded Joints Made of VMD Industrial Titanium	929

ASTORIA: Library of Congress

80/1958
9-12-58

Chart 6/6

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320009-7

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320009-7"

TSYRKINA, Ye. D. (Engr)

Dissertation: "Separate and Combined Influences of Structural Factors on the Cyclic Strength of Steel." Cand Tech Sci, Central Sci Res Inst of Technology and Machine Building (TsNIITMash), 14 Jun 54. (Vechernyaya Moskva, Moscow, 4 Jun 54)

SO: SUM 318, 23 Dec 1954

L 13274-66 FWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b)/EWA(h) JD

ACC NR: AP6002907

SOURCE CODE: UR/0286/65/000/024/0073/0073

INVENTOR: Shvarts, V. I.; Tsyapkina, Ye. D.; Rogachevskiy, Ya. Ye.; Shakhnovich, V. A.;
Uvarov, V. A.; Rovenskiy, I. L.; Balter, M. A.; Likhovskikh, M. N.

ORG: none

TITLE: Cast, heat-resistant, iron-base alloy. Class 40, No. 177078

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 73

TOPIC TAGS: alloy, cast alloy, heat resistant alloy, iron base alloy, chromium containing alloy, nickel containing alloy, tungsten containing alloy, molybdenum containing alloy, niobium containing alloy, manganese containing alloy

ABSTRACT: This Author Certificate introduces a cast, heat-resistant, iron-base alloy. To improve mechanical and technological properties, the alloy composition is as follows: 0.18—0.22% carbon, 19—21% chromium, 24—26% nickel, 4.5—5% tungsten, 0.9—1.1% molybdenum, 0.9—1.1% niobium, 0.1% nitrogen, 0.02% cerium, 0.005% boron, 0.8% max silicon, 1.2—1.5% manganese, 0.03% max each of sulfur and phosphorus. [AZ]

SUB CODE: 11/ SUBM DATE: 10Oct63/ ATD PRESS: 4185

UDC: 669.15'24'26-194

Card 1/1

TSYPKO, A.K.

Correlation of the structural plans of the Mesozoic and Paleozoic
in the northwestern sector of the Dnieper-Donets Lowland. Neft. i
gaz. prom. no. 2:13-15 Ap-Je '65. (MIRA 18:6)

NIKIFOROV, V.P.; ~~TSYPLAKOV~~, A.M.; LEBEDEV, V.I.

Selecting the number and the design of anodic pins for aluminum electrolytic cells with current fed from on top. TSvet. met. 33 no.10:56-62 0 '60. (MIRA 13:10)

1. Vsesoyuznyy alyuminiyevo-magniyevyy institut.
(Aluminum--Electrometallurgy)

AUTHORS: Vetyukov, M.M., Tsyplakov, A.M. SOV/163-58-1-46/53

TITLE: The Influence Exerted by Carbon on the Electric Conductivity of the Cryolite-Alumina Melt (Vliyaniye ugleroda na elektroprovodnost' kriolito-glinozemnykh rasplavov)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 1, pp 247 - 251 (USSR)

ABSTRACT: The electrolyte in the production of aluminum is a melt of the system $\text{Na}_3\text{AlF}_6\text{-AlF}_3\text{-Al}_2\text{O}_3$ with a small amount of CaF. The electric conductivity of this electrolyte is considerably influenced by the carbon impurities. A formation of aluminum carbide on the surface of the carbon electrodes probably effects a decrease in the electric conductivity. By the addition of calcium fluoride to the electrolyte melt the effect of the carbon particles is removed. Aluminum fluoride is also used for the same purpose. The authors discussed the positive influence exerted by aluminum fluoride and calcium fluoride in the process of aluminum electrolysis. There are 3 figures, 2 tables, and 6 references, 6 of which are Soviet.

Card 1/2

The Influence Exerted by Carbon on the Electric
Conductivity of the Cryolite-Alumina Melt

SOV/163-58-1-46/53

ASSOCIATION: Leningradskiy politekhnicheskii institut (Leningrad Poly-
technical Institute)

SUBMITTED: October 1, 1957

Card 2/2

VETUYKOV, M.M.; TSYPLAKOV, A.M.

Effect of carbon on the electric conductivity of cryolite-alumina
melts. Nauch. dokl. vys. shkoly; met. no.1:247-251 '58.

(MIRA 11:9)

1. Leningradskiy politekhnicheskii institut.

(Aluminum--Electrometallurgy) (Electric conductivity)

KOROBov, M.A.; TSYPLAKOV, A.M.; TIMCHENKO, B.I.

Thermal field of the cathode in an alumimum electrolytic cell.

TSvet.met. 35 no.2:49-55 F '62. (MIRA 15:2)

(Aluminum--Electrometallurgy) (Heat--Transmission)

TSYPLAKOV, D. M., Cand Tech Sci -- (diss) "Research into the mechanical properties of pressed wood as material for pinions of open geared transmissions." Voronezh, 1960. 23 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Voronezh Forestry Engineering Inst); 200 copies; price not given; (KL, 26-60, 139)

SAMOYLENKO, V.N.; TSYPLAKOV, A.M.

Improving the design of coal-lined aluminum bottoms electrolytic
cells. TSvet. met. 38 no.6:45-49 Je '65. (MIRA 18:10)

KHUKHRYANSKIY, P.N.; ZHITKOV, P.N.; KOVYAZIN, F.Ya.; TSYPLAKOV,
D.M.; OGARKOV, B.I.; OGARKOVA, T.V.; RAKIN, A.G., kand.
tekhn. nauk; SHEYDIN, I.A.; UMYANTSEVA, O.M.; MAL'TSEVSKAYA,
R.P.; KUVAROVA, M.P.; PYUDIK, P.E.; MIROSHNICHENKO, S.N.;
DORONIN, Yu.G.; ASOTSKIY, L.S.; MAREYEV, V.S.; SMOLENSKIY,
K.I., inzh., retsenzent

[Compressed wood and wood plastics in the machinery industry;
a manual] Pressovannaya drevesina i drevesnye plastiki v ma-
shinostroenii; spravochnik. Moskva, Mashinostroenie, 1965.
147 p. (MIRA 18:3)

TSYPLAKOV, K. (g. Petropavlovsk-Kamchatskiy)

Over the Sea of Okhotsk. Grazhd.av. 13 no.8:17 Ag '56.

(MLRA 9:10)

(Aeronautics) (Okhotsk, Sea of--Fishing)

TSYPLAKOV, K. (Astrakhan')

Aerial survey of fish and sea animals. Grazhd.av. 12 no.2:
19-20 F '55. (MIRA 16:1)
(Aeronautics in fishing)

TSYPLAKOV, K.

Fishermen are waiting for flying weather. Grazhd.av. 19
no.7:22-23 J1 '62.

(Kamohatka--Aeronautics in fishing)

AUTHOR: Tsyplakov, M. SOV-27-58-9-8/28

TITLE: There is Something We can Learn from the Residents of Riga
(Yest' chemu uchit'sya u rizhan)

PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1958, Nr 9,
pp 10 - 12 (USSR)

ABSTRACT: A seminary was conducted at the Riga Art Trade School Nr 17,
and was attended by representatives of trade schools from
different regions of the USSR. The attendants were shown
new types of furniture, made by students-cabinetmakers of
this school, as well as new tools used in the manufacture
of high-grade furniture. There are 8 diagrams.

1. Industrial training--USSR

Card 1/1

TSYPLAKOV, M.

Course directed toward the present. Prof.-takh. obr. 17 no.9:23-24
S '60. (MIRA 13:10)

(Communist education)

(Student activities)

★

AKOROVA, Ye.I.; GOLUBINA, V.A.; PETELINA, O.N.; IOFFE, R.M.; TSYPLAKOVA, N.A.;
FARTIGULOVA, R.Z.

Effectiveness of compound health-resort treatment of residual
phenomena following infectious diseases of the central nervous
system. Sbor. nauch. rab. vrach. san.-kur. uchr. profsoiuzov
no.1:29-32 '64. (MIRA 18:10)

1. Pyatigorskiy nevrologicheskiy sanatoriy "Mashuk" (glavnyy vrach
R.Z.Fartigulova, nauchnyy rukovoditel' prof.S.M.Petelin).

NEKRUTMAN, Semen Veniaminovich; FAYERSHTEYN, Yuliy Oskarovich;
FILIPENOK, Petr Andreyevich; TSYPLAKOV, Nikolay Vasil'yevich;
SHCHEPETOV, Al'bert Viktorovich; BAKRADZE, Yu.M., inzh.,
retsenzent; BRAYLOVSKIY, N.G., inzh., red.; NEDVEDEVAM N.A.,
tekhn. red.

[Multiple-unit train cars with machine refrigeration] Sektsii
vagonov s mashinnym okhlazhdeniem. Moskva, Transzheldorizdat,
1963. 386 p. (MIRA 16:5)

(Refrigerator cars)

VAS'KOVSKIY, Stanislav Antonovich,; ~~TSYPLAKOV~~, Nikolay Vasil'yevich,;
GUTMAN, Raisa Aronovna,; BRAYLOVSKIY, N.G., inzh., red,; BOBROVA,
Ye. N., tekhn. red.

[Mechanization of electric welding operations in repairing cars;
practices of the Southwestern Railroad car depots] Mekhanizatsia
elektresvarochnykh rabot pri remonte vagonov; opyt vagonnykh depo
Iugo-Zapadnoi dorogi. Moskva, Gos. transp. zhel-dor. izd-vo, 1958.
49 p. (MIRA 11:12)

(Railroads--Cars--Maintenance and repair)
(Electric welding)

L 01085-67 EWT(m)/ENP(v)/T/ENP(j) IJP(c) WH/RM
ACC NR: AP6022420 (A,N) SOURCE CODE: UR/0229/66/000/002/0058/0061

AUTHOR: Tsyplakov, O. G.

ORG: None

TITLE: Phenomenological bases for the sealing¹⁶ capacity of reinforced polymers

SOURCE: Sudostroyeniye, no. 2, 1966, 58-61

TOPIC TAGS: reinforced plastic, hermetic seal

ABSTRACT: The mechanism of crack formation in reinforced polymers is considered and a model is given to explain the sealing power of these materials. Theoretical methods are discussed for increasing the sealing capacity of reinforced polymers by increasing the concentration of binder and its elasticity and by reducing reinforcement deformation and the diameter of the reinforcing fibers. It is pointed out that the use of twisted fibers or fabric reduces the strength of the reinforced material by introducing anisotropy in tensile properties. A reduction in the diameter of fibers is complicated by technological difficulties in manufacturing the fibers themselves and in making components from the resultant materials. In making airtight components from SVAM and AG-4S/fiberglass-reinforced plastics, additional measures should be taken to provide hermetic sealing without relying on the sealing power of the plastics themselves. Orig. art. has: 2 figures, 9 formulas, 1 table.

SUB CODE: 11/ SUBM DATE: None

Card 1/1 vlr

UDC: 678.16:678.5

BOKIN, M.N.; TSYPLAKOV, O.G.

Theory of the impregnation of glass reinforcing fillers with
polymer binders. Plast. massy no.2:30-32 '66.

(MIRA 19:2)

ORG: Tsyplakov, O. G. FWP(v)/FWP(N)/T LIP(c) WW/RM
 TITLE: Phenomenological bases for airtightness of reinforced polymers 1/2
 SOURCE: Sudostryeniye, no. 5, 1966, 49-53
 TOPIC TAGS: reinforced plastic, hermetic seal, elastic modulus, mechanical fatigue, crack propagation, adhesion, high pressure
 ABSTRACT: This is a continuation of the article published in Sudostryeniye, no. 2, 1966. The author studies the relationship between the loss of airtightness and cohesion-adhesion/binder. This condition originates in the orientation layers perpendicular to the fatigue. The effect of maximum density (H_0). Crack formation is discussed. The effect of oriented polymers on crack formation and propagation is studied. Monodirectional structures should be more resistant to stress concentration. Likewise, thick-layered structures should be more resistant to stress concentration. Layers are loaded by longitudinal layers. When the middle layers are lightly loaded, the thickness of the layer permits shear without disturbing the continuity of the reinforcement. Shearing is due to redistribution of stresses between the layers of longitudinal reinforcement which increases the crack resistance of the material as well as its airtightness.

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8

the
mechanical
strength
in-layer
under a
creasing the
crack resistance
airtightness,

1/2

so crack. brittle than those of highly elastic to their mechanical that of reinforced binders is usually achieved. Unidirectional reinforcement increases resistance to the material. at the cost of mechanical strength. structures are not very resistant to stressed state and have good physical adhesion and cohesion of the binder improvement. While highly elastic materials or metals this is a costly process. Orig. art. has: 5 fig

SUB CODE: 11/ 13/ SUBM DATE: none

Card 2/2 bdh

~~TSYPLAKOV, P.D.~~ TSYPLAKOV, P.D.
SEKIVANKIN, Sergey Andreyevich; SESENKO, Petr Vasil'yevich; TSYPLAKOV,
Pavel Dmitriyevich; MAKSIMOVICH, A.G., redaktor; MEDRISH, D.M.,
tekhnicheskii redaktor

[Jewelry and watches] Iuvelirnye tovary i chasy. Moskva, Gos.
izd-vo trgovoi lit-ry, 1955. 140 p. (MLRA 9:2)
(Jewelry) (Clockmaking and watchmaking)

TSYPLAKOV, N.V.

IGNAT'YEV, Aleksandr Fedorovich; D'YAKONOV, V.K., otvetstvennyy red.;
TSYPLAKOV, N.V., otvetstvennyy red.

[New types of cars for Soviet railroads] Novye tipy vagonov na
zheleznykh dorogakh SSSR. Kiev, 1957. 38 p. (MIRA 11:4)
(Railroads--Cars)

TSYPLAKOV, M.

There is something to be learned from the workers of Riga. Prof.-tekh.
obr. 15 no.9:10-12 S '58. (MIRA 11:11)
(Riga--Cabinetwork--Congresses)

TYURYAKOV, V.G.; TSYPLAKOV, O.G.

Equipment for milling machines. Mashinostroitel' no.9:24
S '62. (MIRA 15:9)
(Milling machines--Attachments)

TYURYAKOV, V.G.; TSYPLAKOV, O.G.

The IZ-8925 pipe-cutting machine. Biul.tekh.-ekon.inform.
no.3:25-27 '61. (MIRA 14:3)
(Pipe cutting)

TSYPLAKOV, O.G.

Simplified method for the design for strength of shells from
glass-reinforced plastics under conditions of internal pres-
sure. Plast.massy no.3:53-56 '64. (MIRA 17:3)

ACCESSION NR: AP4018169

S/0191/64/000/003/0053/0056

AUTHOR: Tsy*plakov, O. G.

TITLE: Simplified method for calculating the strength of glass reinforced plastic casing subjected to internal pressure

SOURCE: Plasticheskiye massy*, no. 3, 1964, 53-58

TOPIC TAGS: shell, shell theory, shell internal pressure, glass reinforced plastic shell, glass reinforced plastic, resin glass webbing, resin glass strand, polymer binder plastic casing

ABSTRACT: Casings and tubing made out of glass reinforced plastics are produced by winding a reinforcing glass filler, impregnated with a polymer binder on a mandrel. The resin-glass web or strands are applied in layers by either a criss-cross or vertical-horizontal winding methods. After curing, the casing walls are clearly layered with heterogeneous structures. The stability of this type of plastic depends primarily upon the type of the reinforcing glass filler

Card 1/4

ACCESSION NR: AP4018169

and the adhesion-corrosion properties of the binder. The author derived equations for a simplified estimation of this stability. The samples were tested for their tensile (breaking) strength. When the casing is loaded with internal pressure, the stresses originating in its walls will be absorbed differentially by the reinforcing layers: the tangential component by the annular layers and the axial component by the longitudinal layers. The author assumes that the reinforcing layers are satisfactorily fitted to each other and that the fibers in every layer are tightly drawn during winding. Then when the casing is loaded with internal pressure, the radial deformation ΔR_i of the wall reinforcing layers will be a constant value for every layer, i.e.

$$\Delta R_i = \Delta R = \text{a constant} \quad (1)$$

The author also assumes that Young's modulus is constant for all reinforcing layers ($E = \text{a constant}$). When the casing is loaded with internal pressure, elastic strain originates in its annular layers:

$$\epsilon_i = \frac{\Delta R}{R_i} \quad (2)$$

Accordingly, the maximum and minimum stresses in the walls will be:

$$\sigma_{\max} = E\epsilon_{\max}; \quad \sigma_{\min} = E\epsilon_{\min} \quad (3)$$

Card 2/4

ACCESSION NR: AP4918169

The average value of the stresses originating in the annular layers is

$$\sigma_{cp,r} = \frac{\sigma_{max} + \sigma_{min}}{2} = \frac{E \cdot \Delta R}{2} \left(\frac{1}{R_{in}} + \frac{1}{R_{out}} \right) \quad (4)$$

On the other hand, the following can be considered for their walled casings:

$$\sigma_{cp,r} = \frac{R_{in} \cdot p}{\delta \cdot \nu} \quad (5)$$

where $\nu = \frac{\delta_a}{\delta_a + \delta_s}$ is the anisotropy coefficient, δ_a is the annular layer thickness, δ_s is the total longitudinal layer thickness $\delta = \delta_a + \delta_s$ is the casing wall thickness P is the pressure in the casing. Equations (4) and (5) can be set equal and, by solving them with respect to the pressure P , we obtain

$$p = \frac{\sigma_{max} \cdot \delta \cdot \nu}{2} \left(\frac{1}{R_{in}} + \frac{1}{R_{out}} \right) \quad (6)$$

The maximum stresses originating in the annular layers of the casing when it is loaded with an internal pressure p can then be determined.

$$\sigma_{max,r} = \frac{p \cdot R_{cp}}{\delta \cdot \nu} \left(1 - \frac{\nu}{4R_{cp}^2} \right) < [\sigma] \quad (7)$$

The longitudinal reinforcing layer is tested under identical stresses

Card 3/4

ACCESSION NR: AP4018169

$$\alpha_0 = \frac{\rho \cdot R_{ep}}{2\pi(1-\nu)} \leq [\sigma] \quad \alpha_0 = \frac{\rho \cdot R_{ep}}{2\pi(1-\nu)} \left(1 - \frac{b}{2 \cdot R_{ep}}\right) \leq [\sigma] \quad (8)$$

Orig. art. has: 4 figures and 7 equations

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 27Mar64

ENCL: 00

SUB CODE: MA, PH

NO REF SOV: 000

OTHER: 000

Card 4/4

TYURYAKOV, V.G.; TSYPLAKOV, O.G.; RAYKHENSHTYEN, I.TS., red.;
GRIGOR'YEVA, I.S., red. izd-va; BELOGUROVA, I.A., tekhn.red.

[Machining of thermoplastics and rubber in small-batch and
unit production] Mekhanicheskaya obrabotka termoplasticheskikh
plastmass i reziny v usloviakh melkoseriynogo i edinichnogo
proizvodstva. Leningrad. 1963. 22 p. (Leningradskii dom
nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Se-
riia: Mekhanicheskaya obrabotka metalla, no.6) (MIRA 16:5)
(Thermoplastics) (Rubber) (Plastics cutting)

RYABENKOV, G.N.; TSYPLAKOV, S.M.; MEL'NIKOVA, G.K.

Screening for screens. Gor.zhur. no.8:72 Ag '62. (MIRA 15:8)

(Screens (Mining))

TSYPLAKOV, V.D.
 ANDON'YEV, V.L.; BAUM, V.A.; BAUMGARTEN, N.K.; BEREZIN, V.D.; BIRYUKOV, I.K.;
 BIRYUKOV, S.M.; BLOKHIN, S.I.; BOROVY, G.A.; BULEV, M.Z.; BURAKOV,
 N.A.; VERTSAYZER, B.A.; VOVK, G.M.; VORMAN, B.A.; VOSHCHININ, A.P.;
 GALAKTIONOV, V.D., kand. tekhn. nauk; GERKIN, Ye.M.; GIL'DEMLAT,
 Ye.D., kand. tekhn. nauk; GINZBURG, M.M.; GIMBOV, P.S.; GODES, E.G.;
 GOBBACHEV, V.N.; GRZHIB, B.V.; GREGULOV, L.F., kand. s.-kh. nauk;
 GRODZENSKAYA, I.Ye.; DANILOV, A.G.; DMITRIYEV, I.G.; DMITRIYENKO,
 Yu.D.; DOBROKHOTOV, D.D.; DUBININ, L.G.; DUNDUKOV, M.D.; ZHOLIK,
 A.P.; ZENKEVICH, D.K.; ZIMAREV, Ye.V.; ZIMASKOV, S.V.; ZUBRIK, K.M.;
 KARANOV, I.F.; KNYAZEV, S.N.; KOLEGAYEV, N.M.; KOMAREVSKIY, V.T.;
 KOSENKO, V.P.; KORENISTOV, D.V.; KOSTROV, I.N.; KOTLYARSKIY, D.M.;
 KRIVSKIY, M.N.; KUZNETSOV, A.Ye.; LAGAR'KOV, N.I.; LGALOV, V.G.;
 LIKHACHEV, V.P.; LOGUNOV, P.I.; MATSKEVICH, K.F.; MEL'NICHENKO,
 K.I.; MENDELEVICH, I.R.; MIKHAYLOV, A.V., kand. tekhn. nauk;
 MUSIYEVA, R.F.; NATANSON, A.V.; NIKITIN, M.V.; OTES, I.S.;
 OGUL'NIK, G.R.; OSIPOV, A.D.; OSMER, N.A.; PETROV, V.I.; PERYSKIN,
 G.A., prof.; P'YANKOVA, Ye.V.; RAPOPORT, Ye.D.; REMEZOV, N.P.;
 ROZANOV, M.P., kand. biol. nauk; ROCHEGOV, A.G.; RUBINCHIK, A.M.;
 RYBCHEVSKIY, V.S.; SADCHIKOV, A.V.; SEMENTSOV, V.A.; SIDENKO, P.M.;
 SINYAVSKAYA, V.T.; SITAROVA, M.N.; SOSNOVIKOV, K.S.; STAVITSKIY,
 Ye.A.; STOLYAROV, B.P. [deceased]; SUDZILOVSKIY, A.O.; SYRTSOVA,
 Ye.D., kand. tekhn. nauk; FILIPPSKIY, V.P.; KHALTURIN, A.D.;
 TSISHCHEVSKIY, P.M.; CHERKASOV, M.I.; CHERNYSHEV, A.A.; CHUSOVITIN,
 N.A.; SHESTOPAL, A.O.; SHEKHTER, P.A.; SHISHKO, G.A.; SHCHERBINA,
 I.N.; ENGEL', F.F.; YAKOBSON, A.G.; YAKUBOV, P.A., ARKHANGEL'SKIY,
 (Continued on next card)

ANDON'YEV, V.L.... (continued) Card 2.

Ye.A., retsenzent, red.; AKHUTIN, A.N., retsenzent, red.; BALASHOV, Yu.S., retsenzent, red.; BARABANOV, V.A., retsenzent, red.; BATUNER, P.D., retsenzent, red.; BORODIN, P.V., kand. tekhn. nauk, retsenzent, red.; VALUTSKIY, I.I., kand. tekhn. nauk, retsenzent, red.; GRIGOR'YEV, V.M., kand. tekhn. nauk, retsenzent, red.; GUBIN, M.F., retsenzent, red.; GUDAYEV, I.N., retsenzent, red.; YERMOLOV, A.I., kand. tekhn. nauk, retsenzent, red.; KARAULOV, B.F., retsenzent, red.; KRITSKIY, S.N., doktor tekhn. nauk, retsenzent, red.; LIKIN, V.V., retsenzent, red.; LUKIN, V.V., retsenzent, red.; LUSKIN, Z.D., retsenzent, red.; MATIROSOV, A.Kh., retsenzent, red.; MENDELEYEV, D.M., retsenzent, red.; MENKEL', M.F., doktor tekhn. nauk, retsenzent, red.; OBRZHKOV, S.S., retsenzent, red.; PETRASHEN', P.N., retsenzent, red.; POLYAKOV, L.M., retsenzent, red.; RUMYANTSEV, A.M., retsenzent, red.; RYABCHIKOV, Ye.I., retsenzent, red.; STASENKO, N.G., retsenzent, red.; TAKANAYEV, P.F., retsenzent, red.; TARANOVSKIY, S.V., prof., doktor tekhn. nauk, retsenzent, red.; TIZDEL', R.P., retsenzent, red.; FEDOROV, Ye.M., retsenzent, red.; SHEVYAKOV, M.N., retsenzent, red.; SHMAKOV, M.I., retsenzent, red.; ZHUK, S.Ya. [deceased], akademik, glavnyy red.; FURSO, G.A., kand. tekhn. nauk, red.; FILIMONOV, N.A., red.; VOLKOV, L.N., red.; GRISHIN, M.M., red.; ZHURIN, V.D., prof., doktor tekhn. nauk, red.; KOSTROV, I.N., red.; LIKHACHEV, V.P., red.; MEDVEDEV, V.M., kand. tekhn. nauk, red.; MIKHAYLOV, A.V., kand. tekhn. nauk, red.; PETROV, G.D., red.; RAZIN, N.V., red.; SOBOLEV, V.P., red.; FERINGER, B.P., red.; FREYGOFER,

(Continued on next card)

ANDON'YEV, V.I.... (continued) Card 3.

Ye.F., red.; TSYPLAKOV, V.D. [deceased], red.; KORABLINOV, P.N.,
tekhn. red.; GEMKIN, Is.M., tekhn. red.; KACHKROVSKIY, N.V., tekhn.
red.

[Volga-Don; technical account of the construction of the V.I. Lenin
Volga-Don Navigation Canal, the TSimlyansk Hydroelectric Center,
and irrigation systems] Volgo-Don; tekhnicheskii otchet o stroitel'-
stve Volgo-Donskogo sudokhodnogo kanala imeni V.I. Lenina, TSim-
lianskogo gidrouzla i orositel'nykh sooruzhenii, 1949-1952; v piati
tomakh. Moskva, Gos. energ. izd-vo. Vol.1. [General structural
descriptions] Obshchee opisanie sooruzhenii. Glav. red. S.IA. Zhuk.
Red. toma M.M. Grishin. 1957. 319 p. Vol.2. [Organization of con-
struction. Specialized operations in hydraulic engineering] Orga-
nizatsiia stroitel'stv. Spetsial'nye gidrotekhnicheskie raboty.
(Continued on next card)

ANDON'YEV, V.I.... (continued) Card 4.

Glav. red. S. IA. Zhuk. Red. toma I.N. Kostrov. 1958. 319 p.
(MIRA 11:9)

1. Russia (1923- U.S.S.R.) Ministerstvo elektrostantsii. Byuro
tekhnicheskogo otcheta o stroitel'stve Volgo-Dona. 2. Chlen-kor-
respondent Akademii nauk SSSR (for Akhutin). 3. Deystvitel'nyy
chlen Akademii stroitel'stva i arkhitektury SSSR (for Grishin,
Razin).

(Volga Don Canal--Hydraulic engineering)

DEMIDOVICH, Ye.A.; TSYPLAKOV, V.D. [deceased]; CHEREDNICHENKO, A.I.

Increasing the durability of three-high rolling mill rolls.
Metallurg 10 no.3:27-28 Mr '65. (MIRA 18:5)

1. Yenakiyevskiy metallurgicheskiy zavod.

TSYPLAKOV, Ye.I.

New machine tools and attachments in the U.S.A. Mashinostroenie
no.1:121-124 Ja-F '62. (MIRA 15:2)
(United States—Machine tools)

TSYPLAKOV, Ye.I.; DONCHIK, I.P.

New foreign machine tools. Mashinostroenie no.6:113-117 N-D
'62. (MIRA 16:2)
(Machine tools)

SHEVCHENKO, A.I., inzh.; TSYPLAKOV, Ye.I., inzh.

Die casting methods abroad. Mashinostroenie no.2:117-122 Mr-Ap
'62. (MIRA 15:4)

(Die casting)

TSYPLAKOV, Ye. I., inzh.

New gear-cutting machines. Mashinostroenie no.5:116-121
S-0 '62. (MIRA 16:1)

(Gear-cutting machines)

TSYPLAKOV, Yu.S.

Planetary gear with a planetary pinion. Nauch. trudy Mosk.
inst. radioelek. i gor. elektromekh. no.41:138-144 '62.
(MIRA 16:10)

TSYPLAKOV, Yu.S.

Analysis of the structure, kinematics, and efficiency of
planetary multidisk variators. Nauch. trudy Mosk. inst.
radioelek. i gor. elektromekh. no.44:171-181 '64.

(MIRA 17:9)

TSYPLAKOV, Yu.S., kand. tekhn. nauk

General form of the equation of bicycloidal motion. Nauch.
trudy Mosk. inst. radioelek. i gor. elektromekh. no. 49
pt. 2:87-91 ' 64 (MIRA 19:1)

PRITULA, Yu.A.; ABRIKOSOV, I.Kh.; AVROV, P.Ya.; KAZACHENKO, A.A.; KILIGINA,
N.I.; KULIKOV, F.S.; MEL'NIKOV, A.M.; TATARINOV, A.G.;
TROYEPOL'SKIY, V.I.; TSYPLENKOV, G.G.; SHPIL'MAN, A.I.;
DAYEV, G.A., vedushchiy red.; LINDTROP, N.T., red.;
YASHCHURZHINSKAYA, A.B., tekhn.red.

[Volga-Ural oil-bearing region; oil potential] Volgo-Uralskaia
neftenosnaya oblast'; neftenosnost'. Leningrad, Gostoptekhnizdat,
1957. 175 p. (Leningrad, Vsesoyuznyi neftianoi nauchno-issledovatel'skii
geologorazvedochnyi institut. Trudy, no.104). (MIRA 16:8)
(Volga-Ural region--Petroleum geology)

TSYPLENKOV, N.

Buffet table. Obshchestv.pit. no.10:49-51 0 '62. (MIRA 15:11)
(Suppers)

TSYPLENKO, N.

Napkin folding. Obshchestv.pit. no.5:48-49 My '62. (MIRA 15:5)
(Table setting and decoration)

TSYPLENKOV, N.

Wedding party. Obshchestv.p't.. no.9:56-57 S '60. (MIRA 13:11)
(Restaurants, lunchrooms, etc.)
(Caterer and catering)

TSYPLENKOV, N.

Tea-banquet. Obshchestv.pit. no.2:58 F '63.
(Table setting and decoration)

(MIPA 16:4)

Tsyplenkov, E. P.
USSR / General and Special Zoology. Insects.

P

Abs Jour: Ref Zhur-Biol., No 3, 1958, 11581

Author : Tsyplenkov E. P.

Inst : Not given

Title : A New Genus of Tribe Thrinchini (Orthoptera, Acrididae) from Western China.

Orig Pub: Entomol. obozrenie, 1956, 35, No 4, 883-885

Abstract: A new genus *Beybienkia* and a new species *B. songorica* from Western China were established. A drawing and a description of the new species were given.

Card 1/1